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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,578	06/27/2007	Dietmar Spanke	SPAN3009/FJD	2711

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EXAMINER	
LOGIE, MICHAEL J	

ART UNIT	PAPER NUMBER
2881	

MAIL DATE	DELIVERY MODE
05/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,578	SPANKE ET AL.	
	Examiner	Art Unit	
	MICHAEL J. LOGIE	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *11-16 and 20* is/are allowed.

6)☒ Claim(s) *18* is/are rejected.

7)☒ Claim(s) *17 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/16/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 17 recites the limitation "the offset generators" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the superpositioning" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 18, the phrase "(e.g. difference)" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Allowable Subject Matter

Claims 11-16 and 20 are allowed.

The following is an examiner's statement of reasons for allowance:

Best references noted are as follows:

Damm et al. (US pgPub 2004/0025569) teaches a device for determining and/or monitoring the density and/or the level of a filling material in a container. A transmitting unit which emits radioactive radiation and a receiving unit which is arranged in such a way that it receives the radioactive radiation or the secondary radiation that is produced by the interaction of the radioactive radiation with the filling material. A regulating/evaluating unit which determines

the density and/or the level of the filling material in the container using the measuring data that is supplied by the receiving unit. The receiving unit consists of individual detector units. These detector units are positioned at different distances from the floor of the container, so that each detector unit directly or indirectly, detects the proportion of radiation that passes through a defined partial area of the container or that is produced in a defined partial area of the container.

Luitwieler (US patent no. 4,049,966) teaches method of inhibiting a measurement of radiation following an overloading radiation surge in a nuclear radiation measuring system which includes apparatus for detecting nuclear radiation and converting same into pulses and for counting the pulses to provide a measure of the nuclear radiation, the method comprising the steps of: ascertaining the rate at which the pulses are generated; detecting the occurrence of a radiation surge exceeding a predetermined energy level; and inhibiting the counting of pulses upon the occurrence of the radiation surge for a time period which varies inversely with the ascertained pulse rate.

Neuhaus et al. (US pgPub 2004/0128098) teaches a radiometric measurement system for measuring a characterizing parameter, such as e.g. fill level, limit level and/or density of a medium, including at least one radioactive source of radiation and at least one detector, which is usually associated with a transmitter, which in turn transmits the signals corresponding to the measurement parameters to a control room or measurement station.

The present invention is distinguished over the above prior art by teaching offset generators which superimpose an offset to the pulse rate provided by the detectors which is fed by a collector line along with a sum signal of the detector signals to a superordinated unit which then provides a measurement signal and/or a status indicative of the radiometric measuring

device. Further the present invention is distinguished over prior art by providing a turnoff switch in each detector that stops an output signal to the superordinated unit when the detector is malfunctioning.

In regards to claim 11, prior art fails to disclose a radiometric measuring device for mounting at a container tillable with a filling substance, comprising: a radioactive source, which, in operation, sends radioactive radiation through the container; at least two detectors, which serve for registering radiation passing through the container and for producing an electrical pulse rate corresponding to the registered radiation; offset generators, which superimpose on the pulse rate of each detector an offset representing a status of such detector; a collector line, to which each detector feeds an output signal corresponding to the superimposing of its pulse rate and its offset; and a superordinated unit, which is fed by said collector line, a sum signal corresponding to the superimposing of the output signals, with said superordinated unit deriving, on the basis of the sum signal, a measurement signal and/or a status of the measuring device.

Claims 13-16 are allowed by virtue of their dependencies on the independent claim 11.

In regards to claim 12, prior art fails to disclose a radiometric measuring device for mounting at a container fillable with a filling substance, comprising: a radioactive source, which, in operation, sends radioactive radiation through the container; at least two detectors, which serve for registering radiation passing through the container and for producing an electrical pulse rate corresponding to the registered radiation offset generators, which superimpose on the pulse rate of each detector a detector-specific offset; turn-off switches, which serve for suppressing transmission of pulse rate and offset, when a detector malfunctions; a collector line, to which each properly working detector feeds an output signal corresponding to the superimposing of its

pulse rate and its offset; and a superordinated unit, which is fed by said collector line a sum signal corresponding to the superimposing of the output signals, with said superordinated unit deriving, on the basis of the sum signal, a measurement signal and/or a status of the measuring device.

In regards to claim 20, prior art fails to disclose a radiometric measuring device for mounting at a container tillable with a filling substance, comprising: a radioactive source, which, during operation, sends radioactive radiation through the container, first and second detectors, which serve for registering radiation passing through the container and for producing an electric pulse rate corresponding to the registered radiation and for transmitting an output signal corresponding to the pulse rate to a superordinated unit, wherein: said radioactive source has a strength, in the case of which, for each detector, always a minimum pulse rate greater than zero is to be expected, wherein: in each detector, a turn-off switch is provided, which suppresses transmission of the output signal to said superordinated unit, when the detector is malfunctioning; and said superordinated unit derives a measurement signal and/or a status of the measuring device on the basis of the output signals.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See references cited for a listing of the pertinent prior art found and the prior art found.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. LOGIE whose telephone number is (571)270-1616. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J. L./
Examiner, Art Unit 2881

/David A Vanore/
Primary Examiner, Art Unit 2881